Interactive harp seal

PARO

Therapeutic Robot
MCR-900
MCR-A888
User Manual

How to take care of PARO

◆We would like to thank you for purchasing PARO.

CAUTION-ELECTRIC TOY : PARO is not recommended for children under 8 years of age. As with all electric products, care should be exercised during handling and use to prevent electric shock.

ATTENTION:
JOUET ELECTRIQUE Non recommandé pour les enfants moins de 8 ans d'âge. Comme avec tous les produits é lectriques, les pr é cautions devraient être remarquées pendant la manipulation et l'utilisation pr évenir le décharge électrique.

⚠ Warning Since PARO is an electric toy, care must be exercised to prevent fire or personal injury while using PARO.

In this manual, we will provide you with important information for safely using and caring for PARO.

Read the User Manual carefully and follow its instructions while operating PARO. Be sure to save the User Manual for future

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NOTE: Although the positive emotional effects of PARO are well-documented, the therapeutic effects of using PARO will differ from person to person and, therefore, cannot be guaranteed.

Introduction

This product has been designed with the user's safety in mind.
Improper use, however, can cause fire, electric shock, or personal injury.
To prevent accidents from occurring, follow these instructions carefully.

Before you turn PARO on, read the safety instructions on pages 4-14.
You will find general instructions about PARO on these pages.
After you have read those instructions, make sure to keep this manual for future reference.

In case of

- Smoke
- Strange noise or strange smell
- Water or a foreign object gets inside PARO
- PARO is dropped and stops working

1. Unplug the AC adaptor from the wall.
2. If PARO is moving, turn it off by pressing the switch located between its hind flippers (refer to page 17).
3. Remove the battery pack (refer to pages 29,30).

If you experience any difficulty operating PARO, stop using it immediately.
Refer to the Customer Support Booklet for information about our customer support services.
In the case of any repairs, charges may apply.

Important information about this Manual

The following symbols are used in the User Manual.
Before you start using PARO, knowing these symbols will help you to use the product safely.

⚠ Warning Improper use of PARO can cause fire, electric shock, or serious personal injury. Warning notices draw your attention to hazards that may endanger your health or life, or the health or lives of others.

Notice This is a warning against something that may cause damage to PARO or other property if the warning is ignored.
You are informed what you must or must not do in order to avoid or reduce the risk of damage to PARO or other property.

Symbols and their meanings

Fire

Electric shock

Prohibition

Prohibited

Do not get wet

Do not touch with wet hands

Directions for use

Unplug

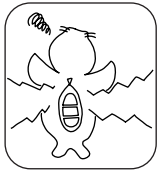
Safety Instructions

⚠ Warning

Do not use PARO in steamy, damp, or dusty areas.

Use of PARO in steamy, damp, or dusty areas can cause fire or electric shock.
Never use PARO in the bathroom.
➲PARO cannot swim!!
➲PARO cannot be washed!!

Do not disassemble or modify PARO.



Disassembling or modifying PARO can cause fire, electric shock or personal injury, and will void your warranty.

This may cause fire or electric shock.
If water or objects get inside PARO, immediately turn PARO off by pressing the on/off switch.
Remove the battery pack.
Have PARO inspected and repaired.

Do not use PARO near a source fire.

Charging or leaving PARO near a source of fire or in bright sunlight can cause fire or electric shock.

Do not sleep with PARO.
Sleeping with PARO for a long time.

(e.g. throughout the night) may cause PARO to overheat and could cause burns to the user.

Do not cover PARO with clothing or other materials.

Covering PARO with clothing or other materials can cause PARO to overheat. Overheating can cause a fire or cause PARO to malfunction.

- Do not leave PARO on a thick carpet or fabric such as a blanket.
- Do not cover PARO with clothes or other materials.
- Do not dress PARO in clothing.

⚠ Warning

Do not wash PARO's fur.
Do not use detergent on PARO.

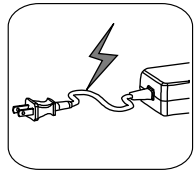
If water or detergent gets inside PARO, it can cause a fire or damage PARO.

Do not use any AC adaptors or battery packs except those provided in the box.
Use of AC adaptors or battery packs other than those provided can cause a fire or electric shock.
PARO must only be used with the recommended AC adaptor.

Do not use or leave PARO in direct sunlight or near other sources of heat.

If left in direct sunlight or close to a source of heat, PARO can overheat and cause a fire.

Avoid damage to the electrical cord.



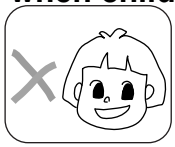
If the electric cord is damaged, it can cause a fire or electric shock.
In order to avoid damaging the electric cord:

- Do not let the cord get pinched between furniture and the wall.
- Do not modify the cord.
- Keep the cord away from children.
- Do not let children put the cord in their mouths.
- Keep the cord away from heat-producing appliances or other sources of high heat.
- Do not put heavy objects on the cord.
- Do not wind the cord around the AC adaptor.
- When you are unplugging the AC adaptor, hold onto the plug and do not pull the cord.

◆If the cord is damaged, stop using it immediately.

⚠ Warning

Make sure an adult is present when children are using PARO.



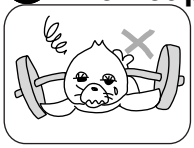
Unsupervised children can get their fingers stuck in the mechanism, swallow small parts removed from PARO or cause serious accidents while using PARO.
This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
If they have been given supervision orinstruction concerning use of the appliance in a safe way and understand the hazards involved.
Children shall not play with the appliance.
An adult who has read and understood the instructions should make sure that children are PARO properly.
PARO is not intended for use by children under 8 years old.

Although PARO has an anti-electromagnetic-wave shield, if you have a pacemaker, keep PARO away from your chest during use.
Electromagnetic waves may interfere with the operation of pacemakers.
In case of any malfunction of your pacemaker while using PARO, consult your doctor immediately.

Keep PARO's whiskers from user's eyes.
PARO's whiskers can cause injury if they contact a person's eyes.

Notice

Do not put heavy objects on PARO.



PARO can be damaged if heavy objects are placed on it or PARO is squeezed too hard.
Do not ride or sit on PARO, as PARO could be damaged or you could fall off and suffer serious injury.

Do not put PARO on unstable or uneven surfaces.

Do not put PARO on surfaces where PARO may fall off.
Do not put PARO on its side or upside down as damage can occur.
Do not drop PARO, as it can cause damage to PARO or injury to users or others.

Do not put fragile or hazardous objects near PARO.
Since PARO can move on its own, keep fragile or hazardous objects away from PARO.

Turn PARO's power switch off when you want to clean or brush PARO. Only after PARO has fully stopped moving should you clean or brush PARO.

Cleaning and user maintenance shall not be made by children without supervision.

Use caution when unzipping the opening on stomach.
Your finger can get caught in the zipper and you may be injured.

Safety Instructions for use of the AC adaptor

⚠ Warning

Do not use the AC adaptor in steamy, damp, or dusty areas.

If the AC adaptor is used in steamy, damp, or dusty areas, it can cause a fire or electric shock.
Never use the AC adaptor in a bathroom.

Do not use or leave the AC adaptor near a source of fire.

Charging or leaving the AC adaptor near a source of fire or in bright sunlight can cause a fire or electric shock.

Do not modify the AC adaptor.

Modifying the AC adaptor can damage PARO or cause it to stop working. It could also cause the batteries to overheat or explode.
The AC adaptor is not a toy.

Do not cover the AC adaptor with clothing or other materials.

Covering the AC adaptor with clothing or other materials can cause the AC adaptor to overheat, and could lead to a fire.

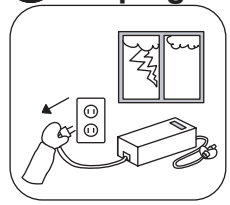
- Do not leave the AC adaptor on fabric (carpet, blanket).
- Do not cover the AC adaptor with clothes or other materials.
- Do not dress the AC adaptor in clothing.

⚠ Warning

Do not touch the plug with wet hands.

If you plug or unplug the AC adaptor with wet hands,
you may get an electric shock.

Unplug the AC adaptor during thunder storms.



An electric surge caused by lightning can cause injury to users or damage to PARO.

Unplug the AC adaptor when you will not be using PARO for an extended period of time.

Do not put the AC adaptor's connector in your mouth.

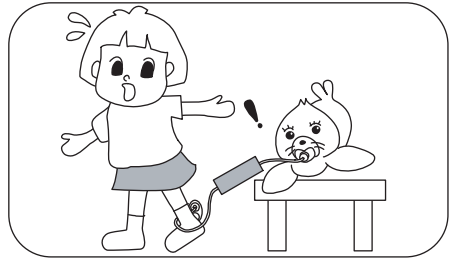
The AC adaptor's connector can cause electric shock if it is put inside a person's mouth. Make sure that children do not put the connector in their mouths when playing with PARO.

⚠ Warning

Do not use or leave the AC adaptor in direct sunlight or near heat-producing appliances.
Leaving the AC adaptor in direct sunlight or close to another source of heat may cause the AC adaptor to overheat, and could lead to a fire or other damage.

Do not use the AC adaptor on unstable or uneven surfaces.
Do not put the AC adaptor where it may fall off.
Do not put the AC adaptor on its side or upside down.

Beware of the electric cords.
If the electric cords are pulled by accident, PARO may fall and cause injury to people nearby.
Keep the electric cords in order.
- Do not wind the electric cord around the AC adaptor.
- If the electric cord is damaged, stop using it immediately.



Do not touch the AC adaptor for a long period of time.
Contact maintained over a long period of time can cause burns to the user.

Safety instructions for PARO's battery pack

⚠ Dangerous actions

- Never allow the battery pack to become immersed in liquid such as water, sea water, etc. Do not let it get wet.
- Do not use or leave the battery pack in areas of high temperature, such as near a fire or heater (176 ° F or more).
- When you charge the battery pack, make sure that it is attached to the main body and use only the designated charger (sold as an option). Do not use anything else.
- If you use the battery pack for any purpose other than for PARO, it may become damaged, its quality deteriorated and its life shortened.
- Do not expose the battery pack to naked flame or heat it up.
- Do not connect the terminal of the battery with metal such as wires. Also, do not carry or store it with metal objects such as necklaces or hair pins.
- Do not subject the battery pack or charger to strong impact. Never not throw them.
- Do not pierce the battery pack with a sharp implement. Do not bang it with a hammer. Do not step on it.
- Never attempt to dismantle or try to convert the battery pack.

Safety instructions for PARO's battery pack

⚠ Warning

- Do not leave it within the reach of an infant or a child.
- Do not place it on or in electromagnetic cookers, microwave ovens or pressure vessels.
- If you notice an odd smell, overheating, change of color or shape, or any other anomalies when using, charging or storing the battery pack, please remove it from the main body or the designated charger and stop using it.
- If there is liquid leakage and liquid get into your eyes, please do not rub your eyes. Instead, rinse them thoroughly with tap water and consult a doctor. Leaving untreated may result in damage to your eyes.

Notice

- Please rinse it off with tap water immediately if any liquid from the battery pack is leaked out and attached to your skin or cloths.

- Do not dispose the used battery pack as your normal waste, and please follow your local authorities instructions.

Recycling the battery pack

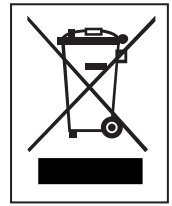
For customor in European Union

DISPOSAL OF LITHIUM-ION BATTERY PACKS.
DISPOSE OF BATTERIES PROPERLY.

Information for Users on Collection and Disposal of Old Equipment and used Batteries

Note:

- These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.
- For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.
- By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.
- For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.
- Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.
- Dispose of used batteries properly.
- Do not dispose of batteries in a fire or trash incinerator.
- The battery must be removed from the appliance before it is scrapped.



Introduction to PARO

PARO is modeled after a baby harp seal. Every year, during the last ten days of February through the first ten days of March, harp seals gather on the ice and in the seawater of St. Lawrence Gulf in northeast Canada to give birth to their babies. The baby harp seal has a coat of soft fur which is light gold in color, and is called the "yellow coat" for the first few days. After that, their fur changes color and they have a pure white coat. They grow by feeding on their mother's milk. After two weeks, the baby harp seal's fur changes to the same grey color as its mother's.

PARO is covered with artificial fur, similar to the fur of the harp seal baby, which is soft and inviting to the touch. PARO's body is also soft and comforting.

Just like the baby harp seal, which spends almost all day sleeping, PARO has a diurnal rhythm consisting of morning, daytime and night. PARO goes to sleep or moves actively according to this daily rhythm. PARO has sensors for sight, hearing, and touch as well as the ability to move autonomously. PARO can also recognize the particular conditions in its environment. For example, PARO can recognize the source of light, learn its name, recognize words for greeting and praise, feel when it is being stroked, or patted forcefully, and when it is being held by a person. Through this interaction between PARO and a person, PARO can react as if PARO has emotions and a warm heart, and develop a character which changes the ways it responds and cries. PARO can also learn the user's preferences for PARO's behavior. Almost all the cries made by PARO use the voice of a real baby harp seal.

PARO is an autonomous robot and can behave as if it has a warm heart or emotions and can show surprise and happiness. PARO expresses its feelings by closing and opening its eyes, as well as moving its head and flippers.

Please take good care of PARO and enjoy it by interacting with it verbally and by touching it. When PARO is stroked softly and gently or held in a person's arms, it feels good and happy. On the other hand, if PARO is hit, it gets angry. When PARO's whiskers are touched it moves its head from side to side, as if it is shy. When interacting with PARO, you will obtain a therapeutic effect, such as a feeling of ease or something to look forward to and enjoy, which will enable you to enjoy daily life.

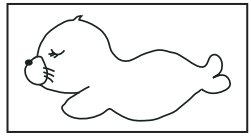
PARO is a handmade product, so each one has different facial features. Please cherish and take care of your PARO for a long time.

For more detailed information, refer to http://paro.jp

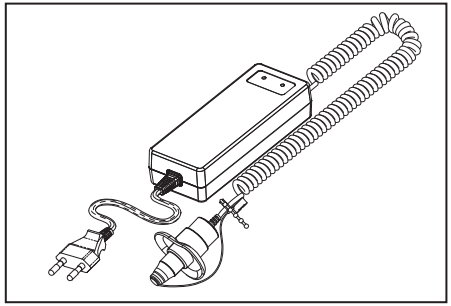
PARO's accessories

Please confirm all of the necessary accessories are included in the box before you start using PARO.

- **PARO**
  Interactive harp seal robot.



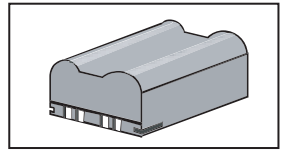
- **AC adaptor**
  This is the battery charger for PARO.
  ※The pacifier is available in two colors.
  Enjoy changing the color of the pacifier that best suits your PARO.



- **Printed materials**
  - Instructions
  - Customer Support Booklet.
    These materials contain important information for using PARO, so do not lose them.

- **Packaging boxes**
  These are the materials PARO was delivered in.
  If you need to return PARO to PARO Clinic for any reasons, you will need these boxes, so retain them in a clean and dry place.

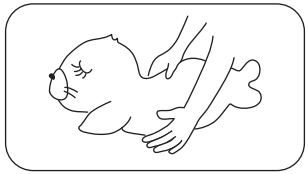
- **Battery pack**
  ※The battery pack is located inside PARO.



Let's turn on PARO!

Before you use PARO, charge the battery pack fully.
Otherwise, you can use PARO by plugging in the AC adaptor.

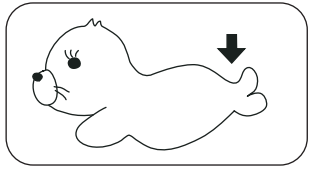
1. Put PARO on a flat surface, like a table or floor, so that PARO is lying on its belly.



Notice

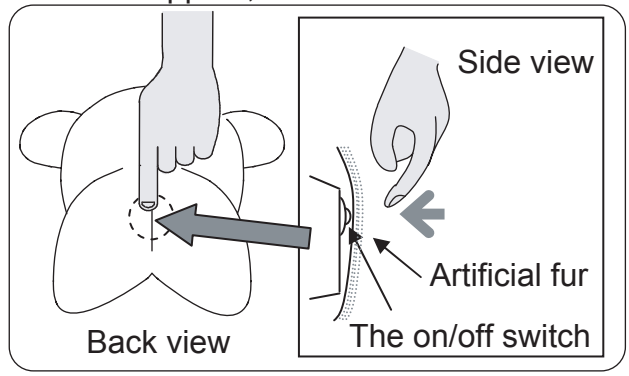
Do not place PARO upside down or on its side. If you do so while you are turning PARO on, it can cause damage to PARO.

2. Press the on/off switch between PARO's hind flippers for one second.
After a few moments, PARO will start moving automatically.



The location of the on/off switch

The on/off switch is located between PARO's two hind flippers, as shown below.



The on/off switch is located underneath the artificial fur.
When you press the switch, it will make a clicking sound.
The on/off switch is not visible because it is concealed by the fur.
You can feel for the switch with your finger.
There is a small bump on the on/off switch.

Let's play with PARO!

After pressing the switch between PARO's hind flippers for a second, PARO will start moving and you can begin playing with PARO.

Petting PARO softly…

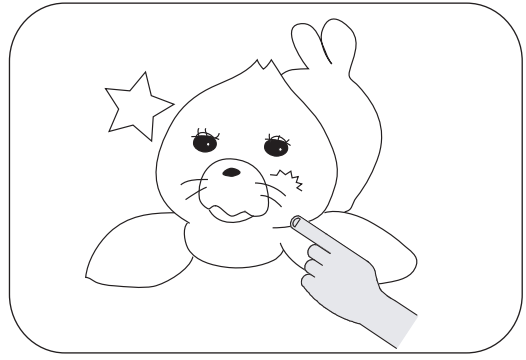
When you gently pet PARO's body, it will cry happily and express feelings of comfort.
You can pet PARO's whole body: it's head, chin, back, and sides.

PARO is sensitive to light

If you flash a bright light on PARO's face, such as taking a picture in the dark, PARO will close its eyes to protect them from the glare.

Touching PARO's whiskers

What will PARO do?



Notice

Do not pull PARO's whiskers when you touch them.
Touch the whiskers gently.
PARO is very sensitive!

Hold PARO in your arms!

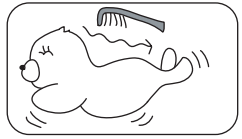
PARO can recognize when it is being held closely.
If you hold PARO roughly, PARO will get angry.

Speak to PARO!

PARO can recognize the sound of its owner's voice.
PARO will respond by crying and moving.

Brush PARO!

Please brush PARO with a soft brush.
Brush PARO gently and in the direction of its fur.



When PARO stops moving

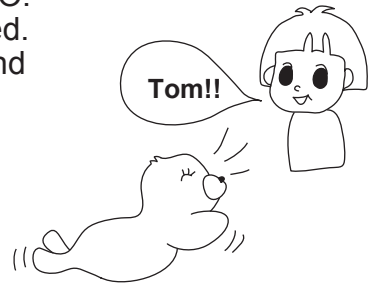
- If you leave PARO alone for a while, it will go to sleep.
  To wake up PARO, you can pet its back, or turn it on by pressing the switch between its hind flippers for one second.
- When the battery is fully discharged, PARO will stop moving.
  Charge PARO using the AC adaptor and the cord with the attached pacifier.

Notice

If PARO's behavior appears abnormal, turn it off by using the on/off switch.
After a few minutes, turn the switch back on.
If the problem persists,
PARO might be damaged. Turn it off.

Name your PARO!

PARO learns the name it is frequently called by its owner.
For example, when you repeatedly call it "Tom," instead of PARO.
PARO learns that its name is Tom and responds when it is called.
PARO can also recognize the person who is calling its name, and can respond to the person's voice.
PARO responds to the person who calls it the most.
Even if some other person calls PARO by name, PARO will not respond to that other person.
Go ahead and give PARO your favorite name!



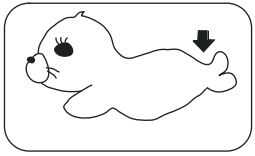
Interact with PARO often and for a long time!

Pets tend to resemble their owners.
PARO is no exception.
PARO learns how to respond through interaction with its owner.
When PARO is treated roughly, PARO can easily get angry.
If PARO is petted gently, it will feel happy.

Notice

When you are grooming PARO (cleaning, washing, brushing), turn it off.

If PARO is left on, it may be damaged.

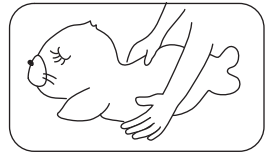


Do not pull PARO's fur roughly.
Do not pull PARO's whiskers.

If you do, they may fall out or break.

Do not hold PARO with only one hand, or by grabbing its fur.

This can damage the fur.
Handle PARO gently with both hands.



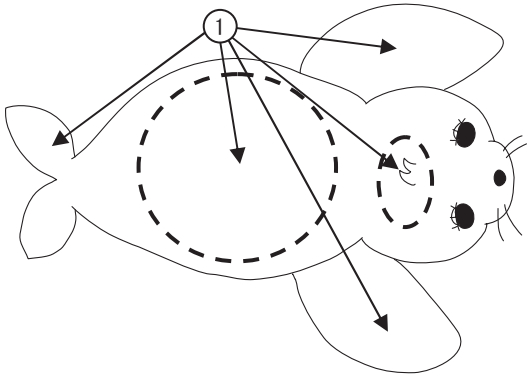
When you are not using PARO

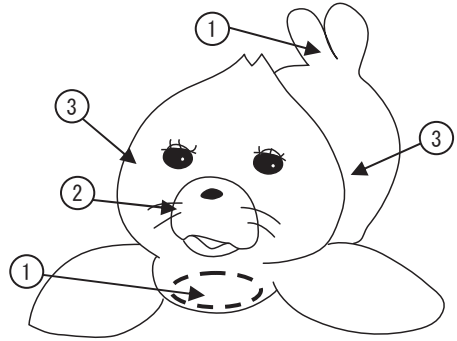
PARO must occasionally have a rest (turn off the switch).

To turn PARO off, press the switch between PARO's hind flippers for 3 seconds.
※Make sure PARO has stopped moving.

We recommend charging PARO whenever you want to play with it. (Refer to page 24, 25 for charging instructions.)

PARO's sensors and feelings





① Touch	Head, back, front and hind flippers, chin, whiskers. When you touch these parts of its body, PARO will respond.
② Vision	PARO can distinguish light intensities as well as flashes of light.
③ Hearing	PARO recognizes words of greeting and praise and can learn its own name. At the same time, PARO can recognize the direction from which a sound is coming.
④ Position	PARO can recognize whether it is being held, and the general position of its body.
⑤ Vocalizations	PARO can vocalize when it is touched or its name is called.
⑥ Motion	PARO can express its feelings by moving its head, front and back flippers, and opening and closing its eyes. When a user interferes with PARO's movements, PARO will shake. This response protects its joints and is normal.
⑦ Temperature	PARO will stop moving if PARO has been active for a long time or it is in a warm room, since PARO does not like to be hot.

Functional explanations

PARO uses electricity

◆Feeding PARO

Real harp seals eat fish, but PARO needs electricity to operate.

If PARO's batteries are not charged enough to operate, PARO will stop moving.

When the charge in the battery is low, PARO will move to show you it is hungry.

When this happens, you can charge PARO by using the AC adaptor.

As well, when PARO is left alone for some time while it is on, will stop moving.

PARO will rest in order to conserve the charge in its battery.

When PARO is resting, you can make it move again by touching its back or providing some other form of stimulation.

Turn off PARO's switch when you are not using PARO.

The switch is located between PARO's hind flippers. (Refer to page 17.)

◆How long can PARO keep moving?

The length of time the battery can support physical movement is about 5 hours, although the exact time depends on the amount of interaction with PARO.

◆When PARO gets hungry (The battery is losing charge)

When the battery loses most of its charge, PARO will call out twice to express its need to have its batteries recharged.

When the batteries are completely discharged, PARO will turn off automatically.

◆You can use PARO even if its batteries are not charged.

When the battery is fully discharged you can still use PARO at any time by plugging in the AC adaptor.

When you use PARO with the AC adaptor plugged in, PARO will not get hungry.

In that case PARO can work continuously.

However, turn the switch off and let PARO have a rest when you are not interacting with PARO.

Notice

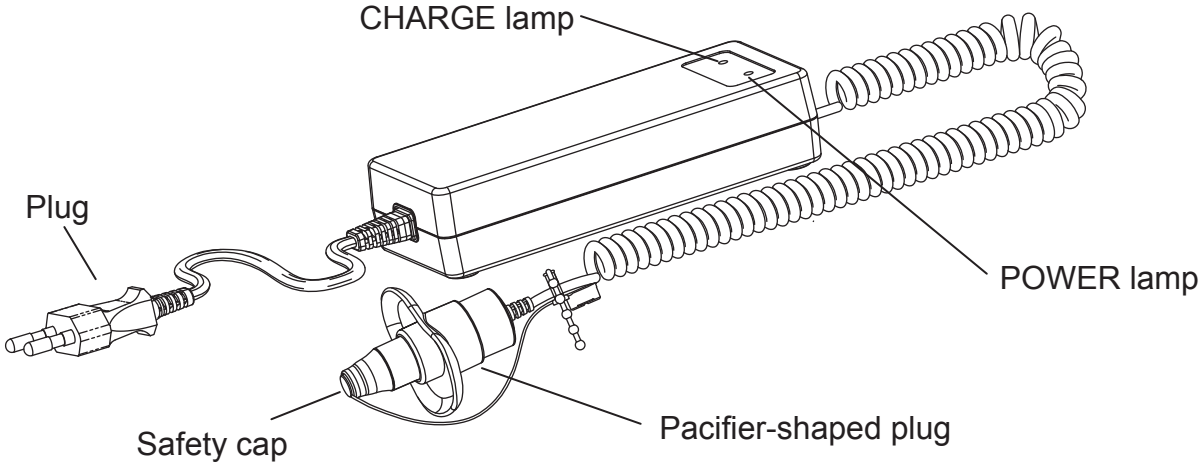
When you are leaving PARO alone for a long period of time, make sure the AC adaptor is unplugged.

How to charge PARO

① Turn PARO off.

② Plug the AC adaptor into the wall.
The POWER lamp will go on.

③ Pull off the safety-cap on the jack and place it into the receptacle inside PARO's mouth.
When the CHARGE light is on, PARO is being charged.
When the CHARGE light goes off, PARO is completely charged.



Charging instructions

- When the battery pack gets hot due to extended use of PARO, the battery will not charge.
  This is done to protect the battery pack from overheating.
- The CHARGE light may go off, even when charging has not been completed.
  If this happens, try unplugging the pacifier jack from PARO's mouth and then plug it in again.
  Charging should then resume until it is completed.
- When PARO is operating with the AC adaptor plugged in, PARO will not charge.
  Charging only occurs when PARO is turned off.
- When PARO is plugged into the AC adaptor, it will not recharge so long as PARO is working.
  PARO works by getting electric power through the AC adaptor.
  Even when the batteries are not charging, the CHARGE light will illuminate.
  ※ It blinks on and off according to PARO's movement. It is not because of a failure.
- Discharge PARO's battery completely before you recharge PARO.
- It takes about 3 hours to charge the battery from empty to full.

How to let PARO operate and rest (switch ON, switch OFF)

◆How to make PARO operate.

・Turn PARO on by pressing the on/off switch for 1 second.
・If PARO does not move when the switch is turned on,
pet PARO on its back and PARO will wake up.

◆How to let PARO rest.

・Press the switch for 3 seconds.
PARO will move into a sleeping position and call in a quiet voice,
signifying it will stop operating, and go to sleep.

Place of serial number (manufacturing number)

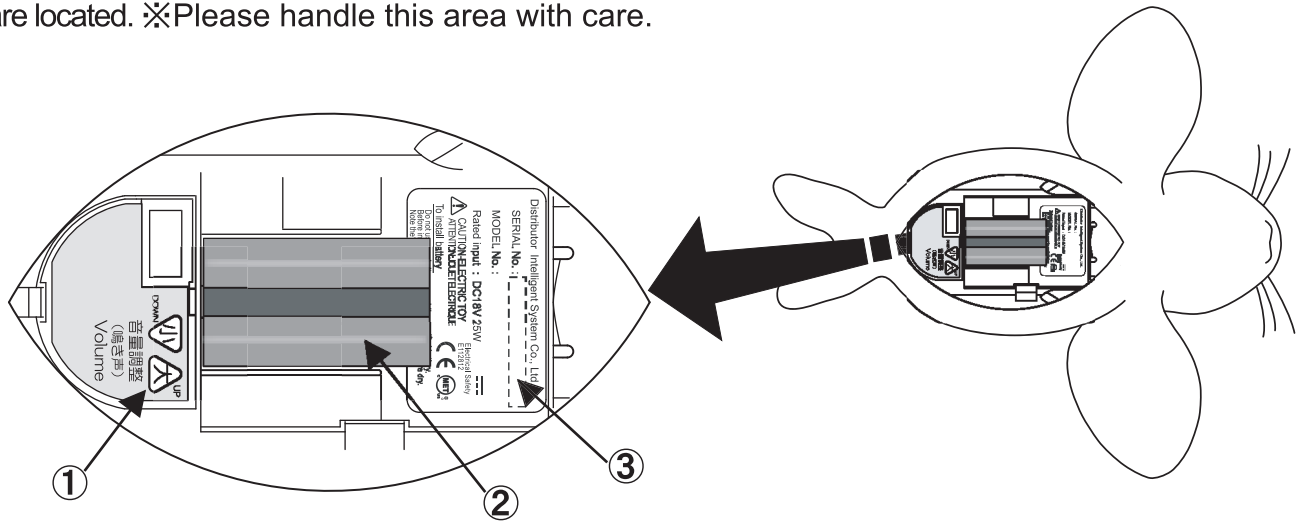
Place where the serial number was stamped.
・ Fancy box (box on which the photo of PARO is printed) side surfaces.
・・・ Please refer to the diagram on the right side.
・ PARO main body・・・Please refer to p. 27,28.
There is one serial number for each PARO;
you will need this serial number when you wish to get support.

※When we receive requests for support,
this number will be used for owner referral,
so please check the number before
making any request for support.

Fancy box
(box on which the photo of PARO is printed)
Side surfaces place where
the serial number was stamped.

PARO's stomach / underside

The underside of PARO holds the battery pack and is where various operational settings are located. ※Please handle this area with care.



PARO's stomach / underside

①Volume control switch
The volume of PARO's voice is adjustable:
press the 'Up' switch to make it louder and the 'Down' switch to make it softer.
Whenever you press a volume control switch, PARO will call with the adjusted volume.

②Battery pack housing base
※For installing and removing the battery pack, please refer to p.29,30.

③Location of marked serial number
It is a production number for each PARO and necessary when you have any services.
This number is marked on the fancy box other than PARO's abdomen area.

①～③are covered by a lid.
Please open the lid when you need to see the serial number.

Initialization of the memory:
You can reset PARO's memory to the factory default at any time by pressing the 'Up' and 'Down' volume control buttons at the same time for about 3 seconds.
The reset is complete after two 'bleep' sounds.

Notice

If you reformat the memory, everything PARO has already learned will be completely erased.

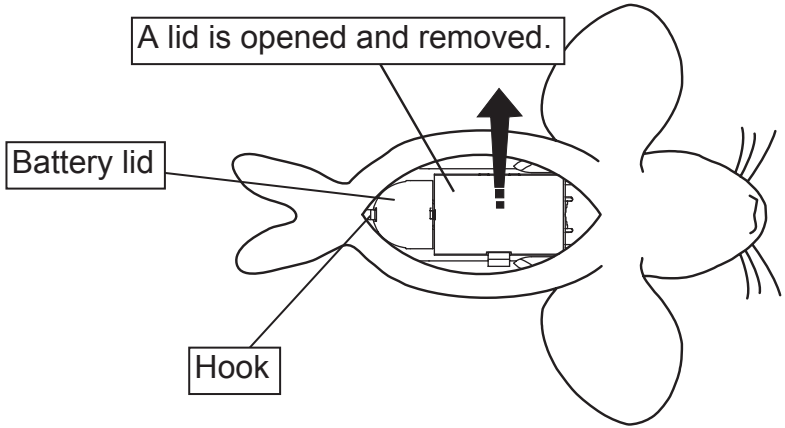
Changing the battery (Replacement instructions)

The battery pack inside PARO will last about 2 year.
The capacity of the battery to hold a charge will gradually decrease over time.

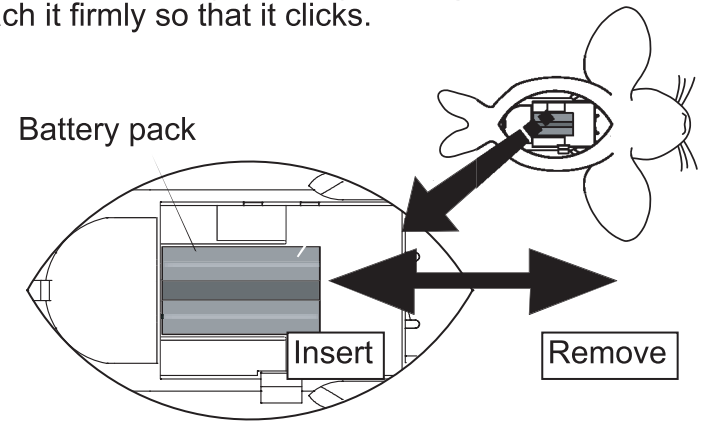
We recommend that you replace the battery pack after using it for 2 year.

1. **Turn PARO off by pressing the on/off switch between PARO's hind flippers.**
   Wait until PARO stops moving.
   ※If the AC adaptor is plugged in, unplug it.

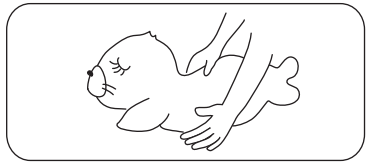
2. **Turn over PARO's body , open the fastener and open the battery lid.**
   To open the battery compartment lid, press the plastic hook and pull the lid off.



3. Please detach the battery pack by sliding it and attach a new battery pack.
Please attach it firmly so that it clicks.



4. Please close the battery lid, close the fastener and put it on the floor as in the illustration below.
Insert the battery lid so that it clicks.



Notice

When you hold PARO, make sure to hold PARO by the body (torso).

Additional information for safe operation of PARO

In order to safely use PARO and prevent damage to PARO and the AC adaptor, you should follow these guidelines:

◆How to use PARO

- ･Do not use PARO in places where it may be dropped or shaken, or on unstable surfaces.
- ･Do not touch or squeeze PARO too hard, such as leaning on it with your elbow.
- ･Do not hit or drop PARO, as it will cause damage.
- ･The power may turn off following a strong impact or when the unit is dropped. Please press the power button again to restart.
- ･Do not hold PARO up, twirl or twist it by its head or flippers.
- ･Do not leave PARO in hot places, such as in bright sunlight or in a closed car.
- ･Do not put foreign materials in PARO's mouth.
- ･Do not use PARO outdoors where it could be exposed to water or other foreign materials that could damage PARO.
- ･Do not put PARO in water.
- ･Do not put stickers on PARO's nose or eyes.
- ･Do not interfere with or restrict PARO’s movements in any way.
- ･Do not disassemble or modify PARO.
- ･When you transport PARO, place it in a shock absorbing container, such as the box it was delivered in, so that you do not damage PARO’s head, body, or flippers.
- ･Do not put PARO in a microwave oven or X-ray machine.
- ･When you use PARO, make sure your hands are clean. The artificial fur may otherwise get dirty and will be difficult to clean.

◆Condensation on PARO

When you move PARO quickly from a low temperature to a high temperature location, the water vapor becomes liquid and condensation occurs.
Do not use PARO when you move it from hot to cold places.
Wait an hour before switching PARO on, as the condensation inside PARO can cause damage.

⚠ Warning

◆How to use the AC adaptor

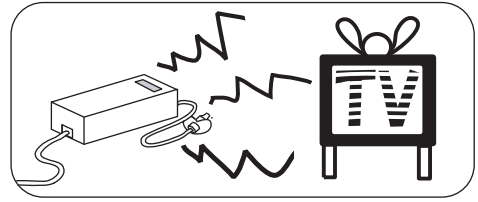
・Use only the AC adaptor provided in PARO's box.
If you use a different AC adaptor, it will not charge PARO and may cause damage or fire.

・Do not separate the AC adaptor into parts or modify it.

・Do not connect the AC adaptor when you are in a foreign country using a AC adaptor.
It can cause overheating and will damage PARO.

・Never leave the AC adaptor in the following places, even for storage, as it can damage the adaptor.

◇Places that are hot.
◇Direct sun light or other heat source.
◇Places with intense vibration.
Places with powerful magnetism.
Sandy or dusty conditions.



・Sand and dust can cause serious damage to PARO.

・Do not drop the AC adaptor.

・Do not use the AC adaptor near TVs or radios, as it may interfere with reception.

・Do not pull the AC adaptor by its cord.

◆When you use PARO while it is plugged in, PARO and the AC adaptor will get warmer.
When you use PARO while it is plugged in, it is normal for PARO and the AC adaptor to get warmer.

◆If PARO or the AC adaptor overheat,
this may indicate that there is a problem.
Immediately unplug the AC adaptor and remove the battery pack from PARO.

⚠ Warning

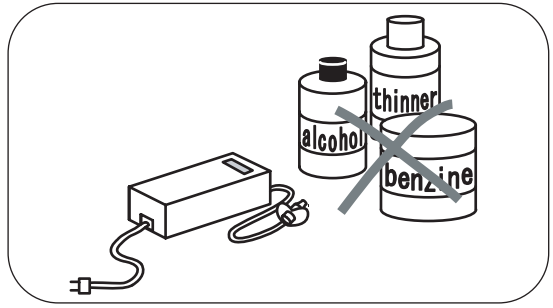
◆How to use the battery pack

- Do not leave the battery in a place where the temperature exceeds 100°F.
- Be careful not to allow anything to contact the battery terminals.
- When you do not use PARO for a long time, remove the battery pack and store it in a cool place. Recharge the battery pack when you haven't used PARO for a long time.
- Do not drop the battery pack or put heavy articles on it.
- Do not apply strong force to the battery pack.
- Do not put the battery pack into a fire.

Notice

Maintenance of the AC adaptor

- If the AC adaptor case is soiled, wipe the casing with a dry soft cloth.
  If the case is still dirty, use a soft cloth lightly moistened with water to wipe the case.
  Dry the case immediately with a soft dry cloth.
- Do not use solvents of any kind as they may damage the AC adaptor.
- Do not leave the case in contact with rubber or vinyl objects for a long period of time, as they may cause the case to deteriorate.

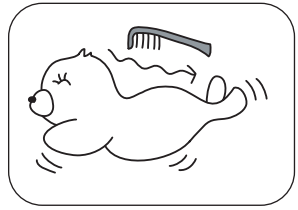


Cleaning PARO's fur

Basic equipment for PARO robot use and cleaning:

- Dapple toy cleaner®(or comparable product)
- Wire brush
- Hand towels
- PDI Super Sani-Cloth Germicidal Disposable Wipes®(or comparable product)
- Purell alcohol-based hand sanitizer gel (or comparable product)
- Although PARO’s artificial fur is made of antibacterial materials, it may get dirty.

- Daily cleaning routine is as follows:
  1. Spray PARO's fur with Dapple cleanser
  2. Gently wipe clean PARO's fur with towel, avoid area around eyes and nose
  3. Wipe down PARO’s fur with PDI Super Sani-Cloth wipe.
  4. Let PARO's fur dry as much as possible
  5. Brush the entirety of PARO’s fur (brush in the direction of the fur)
  6. Clean the brush



Troubleshooting

If you think PARO is not operating properly, please check the following table.
If PARO does not work at all, it may be damaged. Please contact PARO Robots U.S., Inc.

Problem	Cause	Solution
◆You pressed the on/off switch for 1 second and PARO did not turn on.	Battery is not charged. AC adaptor is not inserted correctly (when using PARO with AC adaptor plugged in).	Charge the battery (refer to page 24, 25). Plug in the AC adaptor correctly and press the on/off switch again.
◆Even after charging, PARO does not work.	The on/off switch may not be in the ON position.	Press the on/off switch between PARO's hind flippers for 1 second. (Refer to page 17.)
◆Front and hind flippers do not move.	There may be interference with PARO's movements, such as a thick pile rug or carpet.	Put PARO on another surface.
◆PARO does not call out.	Volume may be too low.	Adjust the volume (Refer to page 27).
◆PARO does not operate shortly after unplugging the AC adaptor, even though the battery appears to be fully charged.	On occasion, the battery will not fully charge to prevent the battery from overheating. If this occurs, charge the battery again according to the charging directions. (Refer to page 24, 25.) If the battery is fully charged and PARO stops working soon after being unplugged from the AC adaptor, replace the battery pack.	

If you notice any abnormality in PARO or its accessories, such as those described below, it is an indication that using them further may be dangerous.
Look at the table below to diagnose the problem and find a solution.

Please also consult PARO Robots U.S., Inc.

Problem	Solution
◆ Damage to the electrical cord. The rubber casing of the electrical cord is damaged.	The cord is no longer protected and there is a risk of shock. Unplug the cord from the wall socket immediately.
◆ The AC adaptor is wet.	There is a risk of electric shock if you continue to use the AC adaptor. Unplug the AC adaptor from the wall socket immediately.
◆ PARO or one of its accessories stopped working after they were dropped or pressed too firmly.	PARO may turn off due to a sharp impact. In this case, please turn it on again. If it still does not move, the base plate may be out of position or there may be a fault with an internal part. To avoid possible injury, please DO NOT attempt to dismantle PARO yourself. Return PARO to PARO Robots U.S., Inc. Do not attempt to disassemble PARO or its accessories, as there is a risk of electric shock and personal injury.
◆ Water is poured on PARO.	Water can cause an electric shock if moisture gets into PARO. If water gets into PARO, immediately turn PARO off and remove the battery pack.

If you notice any abnormality in PARO or its accessories, such as those described below, it is an indication that using them further may be dangerous.
Look at the table below to diagnose the problem and find a solution.

Please also consult PARO Robots U.S., Inc.

Problem	Solution
◆ Abnormal sounds.	※This may occur when PARO's joints are damaged or have moved out of place. Turn PARO off and immediately remove the battery pack. Continued use of PARO could cause the problem to worsen.
◆ Abnormal smells, or there is smoke coming out of PARO.	A short circuit may have occurred in the electrical circuit board or mechanical parts. This can cause a fire or electric shock if you continue to operate PARO. Immediately switch PARO off and remove the battery pack.
◆ PARO heats up more than usual.	Some damage has occurred. Stop using PARO.

Frequently Asked Questions

Question	Answer
◆ What should we do if PARO will not open its eyes and we cannot force them to open manually?	Do not try to open PARO's eyes manually. When PARO is resting, PARO closes its eyes. PARO should wake up when you pet it. If PARO does not wake up even after you have petted it, press the on/off switch to turn it off, and then turn PARO back on. If PARO still does not respond, there may be internal damage to PARO.
◆ After PARO has developed a character, can that character be changed?	You can change PARO's character by changing it's environment and stimulus. Even if PARO has developed a character, it will continue to develop in response to its environment.
◆ PARO gets angry easily. How can I calm PARO down?	Pet PARO gently and softly and call its name. Your gentle attitude will calm PARO down.
◆ PARO tends to stop moving. Is this a problem? ◆ PARO does not respond when I call its name. Is it upset?	PARO will go to sleep if it receives no stimulus, just like a real seal would. Pet PARO softly to wake it up. (When PARO is operating while plugged into its pacifier and AC adaptor, PARO will not go to sleep.) PARO has some difficulty hearing long and complicated names. Please choose a short and clear name for PARO. PARO cannot hear voices when there is a lot of ambient noise. Call PARO's name in a quiet environment.

Answers to frequently asked questions.

Question	Answer
◆ PARO's joints are noisy and its movements are jerky when it is moving around.	When a strong force is applied to its joints, PARO may move noisily or choppily to prevent the joints from being damaged. It is not actually damaged.
◆ PARO's artificial fur is dirty. Can we wash PARO?	No, PARO cannot be washed. Wipe PARO with a soft cloth. If there is any dirt that you cannot remove, you can send PARO in for its artificial fur to be replaced for a charge.

Technical specifications

PARO

CPU	32bitRISC Processor
Joints	Eye (eyelids), Head, Front flippers, Hind flippers
Fur	Antibacterial (top layer)
Hearing	Microphone (3)
Vocalization	Speaker
Internal sensor	Tactile sensor (located in head, chin, torso (top, belly), front and hind flipper) Whiskers, Light sensor, Position sensor, Temperature sensor
Electric power	about 9W
Operation time	about 5 hours (when the battery is fully charged)
Size	about 350 x 160 x 570mm (1325/32 x 69/32 x 227/16 inches) (width * height * length)
Weight	about 2.55kg (including the battery pack) (5.62lb)
Operation temperature	41°F ～ 95°F
Operation humidity	40% ～ 85%
Storing temperature	-4°F ～ 140°F
Storing humidity	10% ～ 90% (except for condensation and ice)

AC adaptor

Input	AC100-240V 50 / 60Hz 25W, 35 ～ 70VA
Output	DC 18V, 1.1A
Operation temperature	32°F ～ 95°F
Operation humidity	20% ～ 90%
Storing temperature	-4°F ～ 167°F
Storing humidity	20% ～ 90% (except for condensation and ice)
Size (without the cord)	around 60 x 35 x 160mm (23/8 x 13/16 x 69/32 inches) (width * height * length)
Weight	around 0.7kg (1.54lb)
Length of the cord	DC cord about 2.0m (783/4 inches) Electrical cord about 2.0m (783/4 inches)

Lithium-ion battery pack

Battery	Lichium ion
Voltage	7.4V DC
Capacity	2600mAh
Operation temperature	32°F ～ 104°F
Operation humidity	65% ± 20%
Storing temperature	-4°F ～ 68°F (for one year)
Storing humidity	65% ± 20% (for one year)
Size	about 40 x 23 x 70 mm (25/16 × 29/32 × 11/4 inches) (width * height * length)
Weight	about 120g (0.26lb)

The specifications and appearance of this product may be modified without notification to the user. We apologize for any inconvenience this may cause.

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